AK Bering Sea and Aleutian Islands (BSAI) Flatfish Trawl Fishery

Fishing gear type: Trawl

Current category: Category II*

Basis for current classification on the LOF: The total annual mortality and serious injury of Steller sea lions (Western U.S. stock) and killer whales (AK resident stock) is more than 1% and less than 50% of each stock's Potential Biological Removal (PBR) level.

Current list of marine mammal species/stocks injured/killed (a ⁽¹⁾ indicates those stocks driving the fishery's classification): Bearded seal, AK; Harbor porpoise, Bering Sea; Harbor seal, Bering Sea; Killer whale, AK resident⁽¹⁾; Northern fur seals, Eastern Pacific; Spotted seal, AK; Steller sea lion, Western U.S.⁽¹⁾; Walrus, AK.

Estimated number of current participants: 34

Take Reduction Teams/Plans that affect this fishery: None.

Year added to the LOF: 1996

Category when originally listed: Category III

Basis for original classification on the LOF: This fishery was originally proposed for Category II listing because incidental take of killer whales (unknown transient and resident stocks) was 8% of the stock's PBR. However, population estimates of both stocks were known to be biased low (because estimates were based on direct counts) and NMFS had good estimates of incidental take in this fishery as a result of 60% observer coverage. Therefore, the levels of take were not thought to have a significant effect on the population and the fishery was listed as Category III.

Estimated number of participants when originally listed: 490

Past names, if any: AK BSAI groundfish trawl fishery (until 2004).

Gear description/method for fishing: This fishery uses trawl gear.

Target species: Flatfish.

Spatial/temporal distribution of effort: Fishing effort in this fishery occurs within the U.S. Exclusive Economic Zone of the Eastern Bering Sea and the portion of the North Pacific Ocean adjacent to the Aleutian Islands, which is west of 170°W. long. up to the U.S.-Russian Convention Line of 1867.

Levels of observer coverage each year[†]: Observer coverage is calculated by the percentage of observed biomass (percentage of tons caught which were observed). Observer coverage for groundfish fisheries is assigned according to vessel length: vessels greater than 125 ft (30.5 m) have 10% coverage; vessels 60-125 ft (18.3-30.5 m) have 30% coverage; and vessels less than 60 ft (18.3 m) are not observed. Observer coverage in groundfish fisheries varies by statistical area and the pooled percent coverage for all areas is provided in the SARs, and is repeated here. From 1998-2005, pooled observer coverage for all areas was: 59.4%, 66.3%, 64.5%, 57.6%, 58.4%, 63.9%, 68.2%, and 68.3%, respectively.

^{*}The fishery is classified based on mortalities and serious injuries of a marine mammal stock greater than 1% and less than 50% (Category II) of the stock's Potential Biological Removal (PBR) level.

[†] Observer coverage levels include the latest information reported in the most current final Stock Assessment Reports (SAR).

Management and regulations: Management measures for the BSAI groundfish fisheries constrain fishing both temporally and spatially. This fishery is federally managed under the BSAI FMP. The authorized gear, fishing season, criteria for determining fishing seasons, and area restrictions by gear type are defined in the regulations implementing the BSAI FMP (50 CFR 679).

History of Changes on the LOF

<u>2010 LOF:</u> Changed the stock name of the Northern fur seals stock from "Eastern North Pacific" to "Eastern Pacific" to match the SARs.

2009 LOF: Estimated number of participants updated from 26 to 34.

2006 LOF:

- Added the following species/stocks to list of species/stocks killed/injured in this fishery to update the stocks associated with the fisheries delineated in 2004: Bearded seal (AK); Harbor porpoise (Bering Sea); Harbor seal (Bering Sea); Northern fur seals (Eastern North Pacific); Pacific walrus; Spotted seal (AK).
- Changed the stock name of the killer whale resident stock from "Eastern North Pacific resident" to "AK resident"
- Deleted killer whale (Eastern North Pacific transient) from the list of species/stocks killed/injured in this
 fishery. Since the 2005 LOF, NMFS performed genetic testing on biopsy samples of killer whales
 killed/injured in this fishery and determined that the fishery only interacts with the resident stock of killer
 whales.
- Added a superscript "1" in Table 1 after killer whale (AK resident) and Steller sea lion (Western U.S.), indicating that takes of these stocks are driving the classification of this fishery.

2005 LOF: Elevated to Category II based on documented interactions with Steller sea lions (Western U.S.) and killer whales (Eastern North Pacific resident and transient stocks). Estimated take of Steller sea lions (Western U.S.) was 3.1 animals/year, or 1.48% of PBR (PBR=209); estimated take of killer whales (Eastern North Pacific resident stock) was 0.5 animals/year, or 6.94% of PBR (PBR=7.2); and estimated take of killer whales (Eastern North Pacific transient stock) was 0.5 animals/year, or 17.86% of PBR (PBR=2.8).

2004 LOF:

- The "AK BSAI flatfish trawl" fishery was split from the Category III "AK Bering Sea and Aleutian Islands Groundfish trawl" fishery. NMFS recognized that the large fishery groups in AK included in the LOF up through 2004 were not homogenous, instead these represented a diverse group of fisheries with different interactions with marine mammals. The larger fishery was delineated into more discrete fisheries according to area, gear and target species to reflect fisheries as managed under the BSAI Fishery Management Plan (FMP). The newly delineated fishery was listed as a Category III until the completion of analyses of serious injury and mortality in the new fishery, with an estimated 26 participants.
- The list of marine mammal species/stocks incidentally killed/injured in the larger fishery was also delineated to correspond to the more discrete fisheries listed for the first time in 2004. The list of species/stocks incidentally killed/injured in the "AK BSAI Pollock trawl" fishery included: Steller sea lion (Western U.S.), Killer whale (Eastern North Pacific resident), and killer whale (Eastern North Pacific transient).

Changes on the LOF when the "AK BSAI flatfish trawl" fishery was included in the larger "AK BSAI groundfish trawl" fishery

2003 LOF:

• NMFS proposed to elevate this fishery to Category II, but did not elevate the fishery at that time based on public comments and the fact that this fishery is made up of a diverse group of trawl fisheries targeting

- different groundfish. NMFS stated its intent to propose fishery delineations within this fishery to accurately reflect the fishing regimes, and evaluate incidental take, in the 2004 LOF.
- Added fin whale (Northeast Pacific) to the list of species/stocks killed/injured in this fishery because this
 stock is known to interact with the fishery and was inadvertently omitted from lists of species in the past.
 NMFS proposed to deleted harbor seals (Gulf of Alaska) from the list, but decided not to do so after
 verifying that the species range overlapped with the fishery range.
- Estimated number of participants updated from 166 to 157.

2001 LOF:

- Added humpback whale (Central North Pacific) and humpback whale (Western North Pacific) to the list of species/stocks killed/injured in this fishery based on the mortality of a single whale in 1998. The stock identification for the whale was uncertain; therefore, the mortality was attributed to both the Central and Western North Pacific stocks.
- Estimated number of participants updated from 193 to 166.

1999 LOF: Estimated number of participants updated from 186 to 193.

1998 LOF: Estimated number of participants updated from 490 to 186.